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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,582	01/08/2002	Tetsuya Kojima	Q67851	1430

7590 07/09/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

MILORD, MARCEAU

ART UNIT	PAPER NUMBER
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2682

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DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,582

Applicant(s)

KOJIMA ET AL.

Examiner

Marceau Milord

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Dasvies et al (US Patent No 6392561 B1).

Regarding claim 1, Davies et al discloses a rotary non-contact connector (figs. 1-3) comprising: a rotary transformer composed of a rotor that has a rotor-side transformer winding and an annular stator that is concentric with the rotor and has a stator-side transformer winding (col. 8, lines 1-55); a rotating-side radio transceiver provided on the rotor (col. 11, lines 2-51); and a stationary-side radio transceiver that is fixedly disposed to oppose the rotating-side radio transceiver, wherein electric power is supplied to the rotor through the intermediary of the rotary transformer to perform radio communication (col. 13, lines 14- col. 14, line 67; col. 19, line 13- col. 20, line 67; col. 21, lines 35-col. 22, line 27).

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Regarding claim 2, Davies et al discloses a rotary non-contact connector (figs. 1-3), wherein a non-magnetic and non-magnetized bearing is provided between the rotor and the annular stator (col. 11, lines 20- col. 12, line 37).

Regarding claim 3, Davies et al discloses a rotary non-contact connector (figs. 1-3), comprising an electric circuit that is provided on the rotor and adapted for driving the rotating-side radio transceiver, wherein electric power is supplied to the electric circuit through the intermediary of the rotary transformer (col. 13, line 41- col. 14, line 60).

Regarding claim 4, Davies et al discloses a rotary non-contact connector (figs. 1-3), wherein a power output terminal of the rotary transformer is divided into two terminals, one terminal being directly coupled to the electric circuit, while the other terminal being coupled to the electric circuit through the intermediary of storage means composed of a capacitor or a storage cell (col. 23, line 1- col. 24, line 67).

Regarding claim 5, Davies et al discloses a rotary non-contact connector (figs. 1-3), wherein one or pluralities of the rotating-side radio transmitters-receivers are provided directly on the rotor or a mounting plate connected to a part of the rotor (col. 23, line 43- col. 24, line 44).

Regarding claim 6, Davies et al discloses a rotary non-contact connector (figs. 1-3), wherein the rotating-side radio transceiver or the stationary-side radio transceiver has at least an antenna (col. 13, line 40- col. 14, line 41).

Regarding claim 7, Davies et al discloses a non-rotary non-contact connector (figs. 1-3) comprising: a first stationary member having a first transformer winding; a second stationary member that is disposed to oppose the first stationary member and has a second transformer

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Winding (col. 14, lines 2- 56); a first radio transceiver provided on the first stationary member; and a second radio transceiver provided on the second stationary member (col. 23, line 48- col. 24, line 55), wherein electric power is supplied to the first stationary member or the second stationary member on a power-supplied side by means of magnetic coupling between the transformer windings to perform radio communication between the radio transmitters-receivers (col. 13, lines 14- col. 14, line 67; col. 19, line 13- col. 20, line 67; col. 21, lines 35-col. 22, line 27).

Regarding claim 8, Davies et al discloses a non-rotary non-contact connector (figs. 1-3) comprising an electric circuit for driving the first radio transceiver or the second radio transceiver in the first stationary member or the second stationary member on the power-supplied side, wherein electric power is supplied to the electric circuit through the first transformer winding or the second transformer winding on the power-supplied side (col. 13, line 41-col. 14, line 38).

Regarding claim 9, Davies et al discloses a non-rotary non-contact connector (figs. 1-3), wherein a power output terminal of the first transformer winding or the second transformer winding on the power-supplied side is divided into two terminals, one terminal being directly coupled to the electric circuit, while the other terminal being coupled to the electric circuit through the intermediary of storage means composed of a capacitor or a storage cell (col. 23, line 1- col. 24, line 67).

Regarding claim 10, Davies et al discloses a non-rotary non-contact connector (figs. 1-3), wherein one or a plurality of the first radio transmitters-receivers or the second radio transmitters receivers are provided directly on the first stationary member or the second

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stationary member on the power-supplied side, or on a structural member connected to a part thereof (col. 23, line 43- col. 24, line 44).

Regarding claim 11, Davies et al discloses a non-rotary non-contact connector (figs. 1-3), wherein the first radio transceiver or the second radio transceiver has at least an antenna (col. 13, line 40- col. 14, line 41).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Karitis US Patent No 6118192 discloses a device for use in highly integrated radio frequency transceivers utilizing micro-electro-mechanical systems.

Cripe US Patent No 6169339 B1 discloses a wireless rotating signal transducer.


Mitsuzuka US Patent No 6147416 discloses a rotatable connector with a tuning angle detecting function wherein two concentric housing grooves are formed on the opposite surfaces of a stator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MARCEAU MILORD

Marceau Milord

Examiner

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